

ABSTRACT OF THE DISCLOSURE

A plasma processing apparatus includes a chamber in which a plate to be processed is contained, an introductory port via which a hydrogen-atom-  
5 containing gas is guided into the chamber, a lower electrode on which the plate is laid in the chamber, an upper electrode disposed opposite to the lower electrode and causing electric discharge in the chamber to produce a plasma, a power supply which supplies  
10 voltage between the lower and upper electrodes, and a metal oxide structural body disposed in a part in the chamber, the metal oxide structural body being reduced when the hydrogen-atom-containing gas is introduced.